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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,125	07/23/2001	Jens-Peter Seher	987.0006USU	2403

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

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BRIARCLIFF MANOR, NY 10510

EXAMINER

GORDON, BRIAN R

ART UNIT

PAPER NUMBER

1743

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/911,125

Applicant(s)

SEHER ET AL.

Examiner

Brian R. Gordon

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 9-11, 14 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 12 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7-23-01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I in the paper filed January 20, 2004 is acknowledged. The traversal is on the ground(s) that the claims of Group I involve a search for a system that includes, inter alia, (1) a pressure variation means for moving the sample fluid under the influence of a pressure variation applied to the system, and (2) timing means for controlling the timing for releasing a pressure in the pressure variation means. The claims of Groups II and III also include, inter alia, the same two primary recited features in the claims of Group I, i.e., they include (1) moving the sample fluid under the influence of the pressure variation, and (2) controlling the timing for releasing a pressure in the pressure variation means. Accordingly, applicants respectfully submit that one searching the system with the recited pressure variation means and timing means having the recited properties would necessarily cover the same art fields as that which would be required to search the claims of Groups II and III with the same properties. This is not found persuasive because Group I requires the structure of a timing means and the method of Group II requires the step of controlling the timing for releasing a pressure, however, the controlling step does not specify what structure (if any) is used to perform the action. The controlling step may be manually performed by hand or automatically by a robotic system. Group III is specifically a computer software program. Neither Group I nor Group II requires the use of a software program or computer.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group III, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3-5, 7-8 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Kilmer US 5,665,601.

Kilmer discloses an aspirator/dispenser (fluid movement system) of liquid has a sensor for sensing contact with the liquid by the dispense vessel, which uses constant pressure air expelled out the tip of the dispense vessel. The sensor is improved in that the line of air pressure feeding into the vessel is vented in parallel with the vessel, to the atmosphere, so that the spike of pressure occurring when the vessel encounters the liquid, is released out the vent, rather than the vessel, thus avoiding bubble formation in the liquid.

As seen in FIG. 2, a tip or vessel 103 is raised or lowered while it is connected to a line 120, which is connected to a pressure transducer detector 124 and a line 122 receiving a source of constant air pressure from a source such as compressed air 123, through valve 121 that is normally open as vessel 103 advances towards fluid such as serum 112 in container 140. (Any mechanism can be used to raise and lower vessel 103, for example a rack 130 and a driven pinion gear 132.) Once fluid 112 is contacted by vessel 103, a conventional piston pump 126 (pressure variation means) can be operated by, e.g., a stepper motor 141, to aspirate liquid into vessel 103 through tip orifice 260 (fluid guiding means that inherently has the ability for the movement of sample fluid into the device via capillary force), and then to dispense the aspirated liquid onto, e.g. a slide test element, or into another container.

The device also comprises a venting system (vent line 200 connected in parallel to vessel 103, by valve 202 connected to line 122, which is also connected to transducer 124, valves 202 and 121 connected to a conventional controller 210, which operates the valves in response to transducer 124) that controls the application and

release of pressure in the system which in turn inherently determines the rate of movement of fluid within the system.

4. Claims 1, 3-4, 6, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Gorog US 5,916,813.

Gorog discloses a method of analyzing thrombotic activity of blood samples that includes providing a capillary tube between a vessel containing a sample of blood and a collection reservoir, applying pressure to the blood to draw it from the vessel through the capillary tube and into the reservoir for a predetermined period of time, and measuring the blood collected in the reservoir within the predetermined time period as an indication of the platelet activity of the blood sample.

The apparatus 2 comprises a capillary tube 4 (fluid guiding means), collection reservoir 6 may conveniently be provided by inserting the capillary tube 4 into the barrel of a syringe 8 in which it is held by a silicon tubing collar 10.

"As illustrated the pressure may be conveniently provided by use of a Pasteur pipette 10 cut below the bulb (pressure variation means) and pushed into the upper end of the barrel of the syringe 8. The pipette 10 can be sealed to the barrel of the syringe 8 using UV curing glue. Prior to use the bulb 12 of the pipette 10 is compressed using a clip 14 (resilient member for counter-against the volumetric variation means)."

Removal of the clip 14 causes application of a vacuum in the syringe 10 which forces the blood to flow from the catheter through the capillary tube 4 into the syringe 10.

The timing of the release of pressure is controlled by the removal of the clip and the elasticity of the bulb element.

5. Claims 1-4 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Aghassi et al. US 2002/0182115 or 6,489,171.

Aghassi et al. disclose a system and method for applying one or more chemicals to a tissue sample. The system preferably includes a cassette for housing a slide device, a film, and an injection system. The slide device preferably includes a specimen slide for containing the tissue sample and a cover plate connected to the specimen slide. The film is preferably moveable through the cassette along guide rollers and preferably contains a plurality of containers containing one or more chemicals. The injection system (pressure variation means) may include a piston (volume variation means) for displacing the chemicals from the containers through an injection port to the tissue sample. The cassette may be placed on a cassette driver that contains a motor-driven shaft for driving the piston and moving the film.

The reciprocating motion of the injection piston is preferably synchronized with the movement of the film such that the piston contacts each holder of the film. In the case that a container is disposed within the holder contacted by the piston, the piston preferably forces the container against the pointed conduit end within the injection port. The pointed conduit (guide means) end preferably punctures the container. The container preferably ruptures, causing the chemical(s) within the container to be released into the injection port. The piston preferably creates pressure within the injection port to cause the released chemical(s) to be positively displaced through the

injection port and into the headspace to stain the tissue sample (sensing element). In the case that the headspace contains a chemical that has been previously injected, such previously injected chemical is preferably displaced out of the headspace by the pressure derived from the piston. The displaced waste chemical is preferably passed through the relief port.

The cassette driver preferably contains a pressure sensitive switch enabling automatic activation of the cassette driver motor when the cassette is detected on top of the cassette driver. A pre-set timing device may be used to stop the motor after a predetermined amount of chemicals have contacted the tissue sample.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yao, Richards et al., Shivets et al. Chuo et al., Chang et al. , Sato et al., Shumate et al., Cottingham et al. and Reichler et al. disclose fluid transfer devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

brg


ARLEN SODERQUIST
PRIMARY EXAMINER